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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
GART, MATTHEW S	
ART UNIT	**PAPER NUMBER**
3625	

DATE MAILED: 01/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/615,363	BUNN ET AL.	
	Examiner	Art Unit	
	Forest Thompson Jr.	3625	

– *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01/26/04 & 06/07/04*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 July 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office Action is responsive to applicant's RCE filed 01/26/2004 and applicant's amendments filed 01/26/2004 and 06/07/2004. Applicant's amendment filed 1/26/2004 amended claims 12, 15-17, and 19-20, and added new claims 21-35. Applicant's amendment dated 06/07/2004 presented arguments pertaining to the prior art of record that was used by examiner in previous actions to reject applicant's instant invention. Claims 12-35 are pending.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action, or will be included here for clarity, as necessary. The text of those sections of Title 35, U.S. Code not otherwise provided in a prior Office action will be included in this action where appropriate.

3. Claims 12-35 have been examined.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 17-20, 28-33, and 35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson,* 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

> The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore,

the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present invention, the claimed aspects of claims 17-20, 28-33 and 35 lack specific application of technology in a non-trivial manner. Claim 17 has no application in the technological arts. Claim 18-20, while referring to technology, present no specific application in the technological arts and are not non-trivial. Claims 28-33 and 35 have no application in the technological arts. Also, the product, per se, of claim 35 is not technologically applied in the method.

To overcome this rejection the Examiner recommends that Applicant amend the claims to better clarify the steps being performed within the technological arts in a non-trivial manner. To expedite prosecution, examiner has identified specific prior art to reject these claims in the sections below.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 12-15, 17-20, 27, and 34-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Burke (U.S. Patent No. 5,848,399).

Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claims 12, 17: Burke teaches:

- a processor unit (Abstract);

- memory, coupled to said processor unit, storing an approximation of an image of said product (Abstract; col. 2 lines 45-59);

- a visual sub-system, functionally coupled to said memory and defining a three-dimensional display area, that simulates said image for said user such that a three-dimensional visual representation of said product appears in said display space (Abstract);

- a monitor, functionally coupled to said processor unit, to display for viewing by said user a selection including each said product (col. 6 lines 23-50);and

- a sales unit, coupled to said processor unit, enabling said user to purchase said product (col. 6 lines 41-50).

Claim 13. Burke teaches said memory is network-coupled via said system (col. 5 lines 35-45).

Claim 14: Burke teaches said memory is coupled to said system via an Internet link (col. 5 lines 35-37), as encompassed by the teaching of *This shopping service 65 may be supported by a cable television system, telephone system or other computer network.*

Claim 15: Burke teaches simulation of at least one further characteristic for said product chosen from the group of characteristics consisting of: sound, texture, mass, smell, temperature, and vibration, is provided said user (col. 7 lines 28-48).

Claim 18: Claim 18 is written as a method and contains the same limitations as claim 12; therefore, the same rejection is applied.

Claim 19: Claim 19 is written as a method and contains the same limitations as claim 12; therefore, the same rejection is applied.

Claim 20: Claim 20 is written as a method and contains the same limitations as claim 12; therefore, the same rejection is applied.

Claim 27: Burke teaches said visual subsystem comprises a dome defining said three-dimensional display area (Abstract), in the teaching of *A three-dimensional modeling and display system which takes size and location information from the retail space management system and generates three-dimensional models of each shelf and product and accesses the product database using the codes provided by the retail space management system to obtain images for each product. It generates a display of each product on each shelf by combining the obtained images and the generated three-dimensional models. The consumer may manipulate the display to change what is being viewed, to examine product packages and to purchase products.*

Claim 34, 35: Burke teaches said product is a physical, three-dimensional object (Abstract).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burke (U.S. Patent No. 5,848,399) as applied to claim 1 above, and further in view of Reisman (U.S. Patent No. 6,658,464).

Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claim 16: Burke does not explicitly teach simulation of at least two further characteristics for said product are provided said user. However, Reisman teaches *A Web browser is an application running at the user's station which can access search engines, find and retrieve Web pages using URLs, and assemble the retrieved elements of text, graphics, sound and video , if present, into a coherent printable document or playable presentation* (col. 35 lines 29-33). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the teaching of Burke to explicitly teach simulation of at least two further characteristics for said product are provided said user, as taught by Reisman, for the motivation of presenting a virtual representation of a product for purchase by a user that portrays a user's desired characteristics to encourage its purchase.

11. Claims 21-26 and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke as applied to claims 12 and 17 above, and further in view of Reisman and Nagamitsu (U.S. Patent No. 5,590,062).

Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part

of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claims 21, 22, 23, 24, 25, 26, 28, 29, 30, 31, 32, 33: Burke teaches said memory stores an approximation of a texture, and a simulation subsystem functionally coupled to said memory that simulates said texture for said user (col. 8 lines 25-39). Burke does not explicitly teach said memory stores an approximation of a sound, a smell, a mass, a temperature, or a vibration of said product, nor a simulation subsystem functionally coupled to said memory that simulates said sound, smell, mass, temperature, or vibration for said user. However, these aspects are taught in the prior art, for example:

- Reisman teaches *A Web browser is an application running at the user's station which can access search engines, find and retrieve Web pages using URLs, and assemble the retrieved elements of text, graphics, sound and video , if present, into a coherent printable document or playable presentation* (col. 35 lines 29-33).
- Nagamitsu teaches *a computer technology which has rapidly advanced in recent years has been adopted to perform an evaluation on 3-D (three-dimensional) living environments by producing virtual living environments. This enables a quick, inexpensive evaluation on the air-conditioning, lighting, sound, etc. This is so-called a computer simulation. Moreover, the simulator enables one to easily experience a simulation in a realistic way by producing a virtual space called a virtual reality using the simulation result. Thus, a massive amount of analysis data necessary at the time of planning can be collected efficiently. The simulation is considered to be*

used to a proposed-type sales technique; and users such as customers (residents-to-be) or a sales man experience a simulation of housing environments prior to construction. (col. 1 lines 43-57)

These teachings encompasses applicant's claimed aspects of said memory stores an approximation of a sound, a smell, a mass, a temperature, or a vibration of said product, and a simulation subsystem functionally coupled to said memory that simulates said sound, smell, mass, temperature, or vibration for said user. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the teaching of Burke to explicitly teach said memory stores an approximation of a sound, a smell, a mass, a temperature, or a vibration of said product, and a simulation subsystem functionally coupled to said memory that simulates said sound, smell, mass, temperature, or vibration for said user, as taught by Reisman and Nagamitsu, for the motivation of providing the user/customer products for purchase in a manner that user can realistically perceive the product as if it were in front of the user/customer and influence the user's/customer's purchase.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Forest Thompson Jr. whose telephone number is (703) 306-5449. The examiner can normally be reached on 6:30 AM-3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on (703) 308-1065. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FT
07/20/2004

Jeffrey A. Smith
Primary Examiner